

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended): An electrical A connecting apparatus ~~structure which connects an auxiliary machinery to a flat cable in which conductors arrayed in a flat configuration are integrally surrounded by an insulating covering, said connecting structure~~ comprising:

~~a housing enclosing said auxiliary machinery, said auxiliary machinery comprising a board on which electronic components are mounted and to which a specific circuitry pattern has been formed;~~

a board side connecting portion and a terminal side connecting portion formed at a proximal end of said housing;

at least one a discrete connection terminal disposed in the housing and having a proximal end which is exposed on the board side connecting portion ~~connects to said circuitry pattern on said board and a distal end which is exposed on the terminal side connecting portion connects to at least one conductor among said conductors of said flat cable;~~

~~a connecting portion disposed on an outer surface of said housing which connects said discrete connection terminal and at least one conductor of said flat cable; and~~

a molded part for sealing said board side connecting portion and terminal side connecting portion; and;

~~wherein a first portion of said flat cable which extends from said connecting portion is provided on and~~ extends along an outer surface of said terminal side connecting portion and is positioned substantially parallel and adjacent to at least a portion of the housing.

wherein the proximal end of said discrete connection terminal forms electrical connection to a circuit board which is provided on the board side connecting portion, and the distal end of said discrete connection terminal forms electrical connection to at least one conductor of the flat cable at the terminal side connecting portion ~~auxiliary machinery.~~

2. Canceled.

3. (Currently amended): A waterproofing structure for an electrical connecting apparatus ~~auxiliary machinery that is directly connected to a flat cable in which conductors arrayed in a flat configuration are integrally surrounded by an insulating covering, and said flat cable is provided on and extends along an outer surface of said auxiliary machinery, said waterproofing structure comprising:~~

~~a housing enclosing said auxiliary machinery, said auxiliary machinery comprising a board on which electronic components are mounted and to which a specific circuitry pattern has been formed;~~

~~a board side connecting portion and a terminal side connecting portion formed at a proximal end of said housing;~~

~~at least one a discrete connection terminal disposed in the housing and having a proximal end which is exposed on the board side connecting portion connects to said circuitry pattern on said board and a distal end which is exposed on the terminal side connecting portion connects to at least one conductor among said conductors of said flat cable;~~

~~an exposed a connecting portion disposed on an outer surface of said housing which connects said discrete connection terminal and at least one conductor of said flat cable; and~~

a molded part for sealing said board side connecting portion and terminal side connecting portion; and

a flat cable which extends along an outer surface of said terminal side connecting portion and is positioned substantially parallel and adjacent to at least a portion of the housing,

wherein the proximal end of said discrete connection terminal forms electrical connection to a circuit board which is provided on the board side connecting portion, and the distal end of said discrete connection terminal forms electrical connection to at least one conductor of the flat cable at the terminal side connecting portion.

4. (Currently amended): An electrical connecting apparatus ~~A mounting structure for auxiliary machinery that is directly coupled to a flat cable in which conductors arrayed in a flat configuration are integrally surrounded by an insulating covering, and said flat cable is provided on and extends along an outer surface of said auxiliary machinery; and where a receiving member is provided with a mounting hole for mounting the auxiliary machinery, said mounting structure comprising:~~

~~a housing enclosing said auxiliary machinery, said auxiliary machinery comprising a connection end engaged in the mounting hole and a board on which electronic components are mounted and to which a specific circuitry pattern has been formed;~~

a board side connecting portion and a terminal side connecting portion formed at a proximal end of said housing;

at least one a discrete connection terminal disposed in the housing and having a proximal end which is exposed on the board side connecting portion connects to said circuitry pattern on

~~said board~~ and a distal end which is exposed on the terminal side connecting portion ~~connects to~~
~~at least one conductor among said conductors of said flat cable;~~

~~a connecting portion disposed on an outer surface of said housing which connects said~~
~~discrete connection terminal and at least one conductor of said flat cable;~~

a mounting portion disposed at a distal end of said housing;

a retainer attachable to ~~the connection end of said~~ mounting portion ~~housing and to the~~
~~mounting hole of said receiving member;~~

a molded part for sealing said board side connecting portion and terminal side connecting
portion, and

a flat cable which extends along an outer surface of said terminal side connecting portion
and is positioned substantially parallel and adjacent to at least a portion of the housing;

wherein the proximal end of said discrete connection terminal forms electrical connection
to a circuit board which is provided on the board side connecting portion, and the distal end of
said discrete connection terminal forms electrical connection to at least one conductor of the flat
cable at the terminal side connecting portion; and wherein said housing auxiliary machinery is
mountable ~~mounted~~ to a mounting hole in a ~~said~~ receiving member by attaching said retainer in
said mounting hole from one side of said receiving member, and attaching said mounting portion
~~housing~~ to said retainer from the other side of said receiving member.

5. (Currently amended): The electrical connecting apparatus ~~A mounting structure for auxiliary machinery~~ according to claim 4, wherein said retainer comprises:

a collar larger than said mounting hole for contacting a surface ~~interlocking with a periphery of said receiving member on mounting hole from~~ a side opposed to a side from which said mounting portion ~~where the housing~~ is attached;

a projecting part for interlocking with a periphery of said mounting hole ~~on from~~ the side of said receiving member from which ~~where~~ said mounting portion ~~housing~~ is attached; and

an interlocking projection that interlocks with said mounting portion ~~housing~~.

6. (Currently amended): The electrical connecting apparatus ~~A mounting structure for auxiliary machinery~~ according to claim 4, wherein said retainer comprises:

a collar larger than said mounting hole for contacting a surface ~~interlocking with a periphery of said receiving member on mounting hole from~~ a side opposed to a side from which said mounting portion ~~where the housing~~ is attached; and

an interlocking projection that interlocks with said mounting portion ~~housing~~,

wherein said housing ~~auxiliary machinery~~ is mounted ~~and firmly fixed~~ to said receiving member ~~in a state~~ such that said mounting portion is disposed within the periphery ~~peripheries of either open side of said mounting hole are held between said collar and a distal end of said housing after said mounting portion it~~ has been mounted in said retainer.

7. (Currently amended): The electrical ~~A connecting apparatus structure~~ according to claim 1, wherein said molded part further seals ~~is secondarily molded over~~ said connection

between said at least one discrete connection terminal and said at least one conductor ~~after said connection is completed.~~

8. (Currently amended): The A waterproofing structure according to claim 3, wherein said molded part further seals ~~is secondarily molded over~~ said connection between said at least one discrete connection terminal and said at least one conductor ~~after said connection is completed.~~

9. (Currently amended): The electrical connecting apparatus A mounting structure according to claim 5, wherein said molded part further seals ~~is secondarily molded over~~ said connection between said at least one discrete connection terminal and said at least one conductor ~~after said connection is completed.~~

10. (Currently amended): The electrical A connecting apparatus structure according to claim 1, wherein the molded part comprises a first two molded part parts, each one arranged to cover which seals the at least one of the opposite end portions of said discrete connection terminal disposed within the terminal side connecting portion and a second molded part which seals the board side connecting portion in the first direction.

11. (Currently amended): The A waterproofing structure according to claim 3, wherein the molded part comprises a first two molded part parts, each one arranged to cover which seals the at least one of the opposite end portions of said discrete connection terminal disposed within the terminal side connecting portion and a second molded part which seals the board side connecting portion in the first direction.

12. (Currently amended): The electrical connecting apparatus A mounting structure according to claim 5, wherein the molded part comprises a first two molded part parts, each one arranged to cover which seals the at least one of the opposite end portions of said discrete connection terminal disposed within the terminal side connecting portion and a second molded part which seals the board side connecting portion in the first direction.

13-15. **Canceled.**

16. (Currently amended): The electrical A connecting apparatus structure according to claim 1, wherein the molded part also seals the connection between the at least one discrete connection terminal of said housing and said circuitry pattern of said circuit board.

17. (Currently amended): The A waterproofing structure according to claim 3, wherein the molded part also seals the connection between the at least one discrete connection terminal of said housing and said circuitry pattern of said circuit board.

18. (Currently amended): The electrical connecting apparatus ~~A mounting structure~~ according to claim 5, wherein the molded part also seals the connection between the at least one discrete connection terminal of said ~~housing and said circuitry pattern~~ of said circuit board.

19. (Currently amended): The electrical ~~A connecting apparatus structure~~ according to claim 1, wherein the molded part seals ~~covers both of the~~ opposite end portions of said at least one discrete connection terminal ~~in the first direction~~.

20. (Currently amended): The ~~A~~ waterproofing structure according to claim 3, wherein the molded part seals ~~covers both of the~~ opposite end portions of said at least one discrete connection terminal ~~in the first direction~~.

21. (Currently amended): The electrical connecting apparatus ~~A mounting structure~~ according to claim 5, wherein the molded part seals ~~covers both of the~~ opposite end portions of said at least one discrete connection terminal ~~in the first direction~~.